

## **ENTREPRENEURIAL SKILL-SUPPORT BUSINESS IN RABBIT PRODUCTION FOR ENHANCING THE INCOME OF TEACHERS OF AGRICULTURE IN KOGI STATE, NIGERIA**

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### **ABSTRACT**

This study was carried out to identify entrepreneurial skills that teachers of agriculture could utilize in rabbit production to enable them embark upon some business activities that could help them increase their income. To achieve this objective, five research questions were developed and answered while five null hypotheses were formulated and tested. A 103 item structured questionnaire was developed from the literature reviewed for the study and utilized in collecting data. Survey research design was adopted for the study. The sample for the study was 68 respondents made up of 43 extension agent and 25 farmers with specialization in rabbit production. The structured questionnaire was face-validated by three experts knowledgeable in rabbit production. The Cronbach alpha method was used to test the internal consistency of the questionnaire items to obtain a co-efficient of 0.95. The questionnaire was administered on 68 respondents; 65 copies of the questionnaire were retrieved and analysed. The weighted mean and standard deviation were used to answer the research questions while t-test statistic was used to test the hypotheses. It was found out that all the identified skills were required. Based on the findings, relevant recommendations were made.

**KEYWORDS:** Entrepreneurial, Skill, Teacher, Kogi, Nigeria

### **INTRODUCTION**

People all over the world require cheap sources of animal protein for their upkeep and body maintenance. The animal protein can be derived from such animals like cattle, goat, sheep, poultry and rabbit. Among all these animals, rabbit seems to be the cheapest source of animal protein. Supporting this view, Lukefahr (2000) said that rabbit is chosen over other livestock because of the low initial costs in establishing and operating system of the animal.

Rabbit in the opinion of Hornby (2006) refers to small animals with soft fur, long ears and short tail which are kept as pets or for food. Sell (2009) said that rabbits are widely raised in the world for a variety of reasons. The author outlined such reasons as production of white meat that is fine-grained, highly palatable, high in protein content, low in fibre and cholesterol content. Martins (1998) said that any size of the project can be profitable. The author stated further that their use could spark a village industry/craft project. To the author, the animal consumes a large amount of forage which people do not eat and convert it into meat which people eat. The author concluded that one doe can produce 4-6 litters of 6-8 young each per year. That is 25 young a year per a doe. Lukefahr, Paschal and Ford (2009) said that rabbit provides nutritious-wholesome meat and its rearing is an enjoyable occupational activity that teaches responsibility, budget costs and returns, care and concern for animals and the acceptance of livestock as a source of food for humans. The author further stated that as a backyard activity, rabbits are quiet, odourless and docile animals that often go unnoticed

by neighbours in residential areas. Entrepreneurial skills are quite essential for any profitable venture in rabbit enterprise. According to Hull (1991) skill is the habit of doing something well while an entrepreneurial skill is a group of skills that demands one's competence in managing production activities for success in the enterprise. This means that an entrepreneur requires mastery of entrepreneurial skills in rabbit production in order to become successful economically. It is very important that for an individual to increase his income base, the individual requires skills in planning, breeding, health management and marketing of rabbit products Lukefahr, Paschal and Ford (2009) stated that rabbit rearing can be an occupation engaged in as a hobby by many individuals, elderly, or any family member. This implies that any category of persons can engage in rabbit keeping for support including teachers

A teacher as defined by the Education Act of 1964 is someone occupying a teaching position in the general education system which requires its holder to instruct students or is the position of principal or head teacher or deputy principal (deputy head-teacher) in a state or registered private school or educational institution. In the opinion of Offorma (2002) it is a person that has acquired special skills required for effective imparting of knowledge and skills to a group of learners (pupils or students). Wikipedia (2008) said that a teacher is a person that facilitates students' learning in a school. In Nigeria, teachers teach in primary and secondary schools. In Kogi State teachers are characterised by

- Low salary
- Having many dependants
- Willingness to train others especially relations and outstanding pupils/students in their classes or community
- Inability to take care of the dependents due to meagre income
- Fear of losing their teaching job for any other full-time employment
- Willingness to take up profitable business as part-time or hobby with the aim of enhancing their income.

The unwillingness of the Nigerian Government to enhance the take home pay of teachers has been a long standing issue between the two parties over the decades. In response to this that Hakeem (2008) stated that Nigerian Union of Teachers (NUT) is pressing for the implementation of Teachers Salary Structure (TSS) which basically means more money but the Federal Government is adamant saying that a teacher's reward is in heaven. Showing concern on the matter, Golu (2009) lamented that the usual reply to teachers' demand is "there is no money to pay; the Governors are broke and cannot carry such responsibility now".

Most teachers resort to engaging in small scale businesses like okada riding and restaurant among others, which are out of their field of teaching just to meet up with their financial demands. Most of them share their time between teaching and petty trading to which they have no training thereby leading to low input. Engaging in two parallel businesses makes them not to be effective in either of the two, resulting to stress, frustration and ill-health, loss of interest in both due to failure. This is because they could not achieve the goal of engaging in business which is enhancement of income. Teachers of agriculture in either primary or secondary schools in Kogi state are not exempted from all these problems. But it is possible that if teachers of agriculture engage in an entrepreneurial support programme in their field such as rabbit production, it will be better than engaging in a business to which they received no training. This type of part-time, less stressful and income generating business would make them become more fulfilling in addition to overcoming stress and frustration. It therefore means that if teachers of agriculture are trained in rabbit production they will meet up with their

financial responsibilities as their income will be enhanced. The purpose of this study is therefore to identify entrepreneurial skills which the teachers of agriculture could utilise in rabbit production as a support business for enhancing their income. Specifically the paper has identified entrepreneurial skills required in planning, breeding, rearing, health management and marketing of rabbit.

## METHODOLOGY

Five research questions were developed and answered by the study while five null hypotheses were formulated and tested. Survey research design was adopted for the study. The study utilized a 100 item questionnaire in collecting data using a four points scale of Highly Required (HR) =4; Averagely Required (AR) =3; Slightly Required (SR) =2 and Not (NR) =1

The population for the study was 68 made up of 43 extension agents, and 25 livestock farmers who are specialists in rabbit production. The entire population was used for the study due to their manageable size. The face validation of the instrument was carried out by three experts in micro livestock production. Cronbach alpha technique was used to determine the internal consistency of the questionnaire items and a coefficient of 0.90 was obtained. The questionnaire was administered on 68 respondents; 65 copies were retrieved and used for analysis.

The research questions were answered using weighted mean and standard deviation while hypotheses were tested using t- test statistics. 2.50 was determined as the arithmetic mean with an interval scale of 0.05 to determine the upper limit on which decision on each item was based; that is 2.55. The decision rule is that any item with mean of 2.55 and above was regarded as required and any item with mean less than 2.55 as regarded as not required.

## RESULTS

The results of the study were obtained from the research questions answered and the hypotheses tested. They were presented in table 1-5 below.

### Research Question 1

What are the entrepreneurial skills required in planning for rabbit production?

### Hypothesis 1

There is no significant difference in the mean ratings of the responses of extension agents and rabbit farmers on the entrepreneurial skills required in planning for rabbit production.

The data for answering the research question and testing the hypothesis were presented in table 1

**Table 1: Mean Ratings and T-Test Analysis of the Responses of Extension Agents, and Rabbit Farmers on the Entrepreneurial Skills Required in Planning for Rabbit Production N=65**

| SN | Item Statement   | X    | SD   | t-Cal | t-Tab | RMK |
|----|--|------|------|-------|-------|-----|
| 1  | Get and read all available literature.                               | 3.44 | 0.61 | 0.81  | 1.98  | *NS |
| 2  | Learn rabbits and how they respond to certain management conditions. | 3.48 | 0.5  | -1.2  | 1.98  | *NS |
| 3  | Visit and discuss with established producers.                        | 2.73 | 0.83 | 1.4   | 1.98  | *NS |
| 4  | Visit and discuss with extension agents.                             | 3.52 | 0.5  | -1.6  | 1.98  | *NS |
| 5  | Formulate specific objectives.                                       | 3.69 | 0.46 | 0.4   | 1.98  | *NS |
| 6  | Decide on the specie of rabbits to raise.                            | 3.2  | 0.82 | 0.48  | 1.98  | *NS |
| 7  | Identify good source of breeder stock.                               | 3.13 | 0.71 | -0    | 1.98  | *NS |
| 8  | Decide on the system of management.                                  | 2.65 | 0.9  | 1.72  | 1.98  | *NS |

**Table 1: Contd.,**

|    |  |       |      |      |      |     |
|----|--|-------|------|------|------|-----|
| 9  | Identify relevant farm input.                | 3.1   | 0.88 | 0.65 | 1.98 | *NS |
| 10 | Identify market outlet for rabbit.           | 2.91  | 0.93 | 0.65 | 1.98 | *NS |
| 11 | Identify relevant records to keep.           | 3.47  | 0.96 | 1.47 | 1.98 | *NS |
| 12 | Make budget for the production.              | 3.51  | 0.63 | 0.02 | 1.98 | *NS |
| 13 | Identify sources of fund.                    | 3.53  | 0.66 | -0.9 | 1.98 | *NS |
| 14 | Start on a small scale of 5 does and 1 buck. | 2.15  | 0.65 | -1.2 | 1.98 | *NS |
| 15 | Review the objectives periodically.          | 2.55  | 0.83 | -0.8 | 1.98 | *NS |
| 16 | Expand the business later.                   | 2.65  | 0.9  | 1.72 | 1.98 | *NS |
| 17 | Improve and develop original stock.          | 3.10. | 0.87 | 0.65 | 1.98 | *NS |

**Key:** X= mean, SD= Standard Deviation, t-cal= t calculated, t-tab=t-table, Rem= Remark, \*= required \*\* Not Required, NS= no significant difference, S= significant difference

The table above showed the mean ratings of the 17 items in planning which ranged between 2.55 and 3.53 except item 14. This implies that 16 out of 17 items were required in planning for profitable rabbit production

The table also revealed that the standard deviation (SD) of the items ranged from 0.46-0.93 which was below 1.96. This indicated that the respondents were not too far from the mean and from one another in their responses. This indicated that the items were valid. Furthermore, all the 16 items had their t-calculated values less than their t-table values. This implied that there was no significant difference in the mean ratings of the responses of the two groups of respondent on the entrepreneurial skills required in planning for rabbit production. Therefore the null hypothesis of no significant difference was accepted for all the items.

## Research Question 2

What are the skills required in breeding of rabbit?

## Hypothesis 2

There is no significant difference in the mean ratings of the responses of extension agents and rabbit farmers on the skills required in breeding of rabbit

The data answering the research question and testing the hypothesis are presented in table 2

**Table 2: Mean Ratings and T-Test Analysis of the Responses of Extension Agents, and Rabbit Farmers on the Entrepreneurial Skills Required in Breeding Rabbit N=65**

| SN | Item Statement   | X    | SD   | t-Cal | t-Tab | RMK |
|----|--|------|------|-------|-------|-----|
| 1  | Provide (construct) the cage 30 x 30 x 28.   | 3.85 | 0.12 | 0.06  | 1.98  | *NS |
| 2  | Provide artificial light during short days (of less than 14 hours).                            | 3.64 | 0.23 | 0.53  | 1.98  | *NS |
| 3  | Provide 40 watts bulbs for every 10ft for better conception.                                   | 3.69 | 0.21 | 0.43  | 1.98  | *NS |
| 4  | Select matured does (4-5 months) for breeding.   | 3.6  | 0.32 | 0.22  | 1.98  | *NS |
| 5  | Identify bucks (4-5months) for mating  | 3.6  | 0.24 | 0.16  | 1.98  | *NS |
| 6  | Take the doe to buck's cage for mating   | 3.51 | 0.33 | 0.14  | 1.98  | *NS |
| 7  | Carry out mating at early morning or late afternoon  | 3.31 | 0.88 | 0.05  | 1.98  | *NS |
| 8  | Watch them mating without disturbing   | 3.32 | 0.78 | 0.9   | 1.98  | *NS |
| 9  | Use buck once a day or 3 times a day for short period intervals.                               | 3.19 | 1    | 0.04  | 1.98  | *NS |
| 10 | Take the doe to a different buck if it did not mate within a few minutes                       | 3.56 | 0.49 | -0.03 | -1.98 | *NS |
| 11 | Try force mating with a young buck before giving up  | 3.47 | 0.49 | 0.03  | 1.98  | *NS |
| 12 | Take doe away from the buck's hutch if the buck shows no interest within the first few minutes | 3.55 | 0.49 | -0.36 | -1.98 | *NS |
| 13 | Eliminate the doe/buck from the herd if it consistently gives a mating problem.                | 3.77 | 0.17 | 0.03  | 1.98  | *NS |
| 14 | Take the doe back to its hutch after mating  | 3.69 | 0.29 | 0.51  | 1.98  | *NS |
| 15 | Palpate calm does 14 days after mating.  | 3.77 | 0.17 | -0.55 | -1.98 | *NS |
| 16 | Rebreed non pregnant doe immediately.  | 3.73 | 0.27 | -0.05 | -1.98 | *NS |
| 17 | House does that are of similar size and due the same time                                      | 3.69 | 0.29 | 0.08  | 1.98  | *NS |

Table 2: Contd.,

|    |  |      |      |       |       |     |
|----|--|------|------|-------|-------|-----|
| 18 | Keep good, accurate and necessary records.   | 3.6  | 0.32 | 0.15  | 1.98  | *NS |
| 19 | Provide a nesting box in the maternity cage 4weeks after mating.                   | 3.69 | 0.29 | -0.07 | -1.98 | *NS |
| 20 | Fill each box with clean hair or straw.  | 3.48 | 0.75 | -0.15 | -1.98 | *NS |
| 21 | Add clean fur from other does' nest (if available) especially during cold weather. | 3.5  | 0.66 | -0.14 | -1.98 | *NS |
| 22 | Check the after birth and allow the doe to eat it                                  | 3.44 | 0.83 | -0.17 | 1.98  | *NS |
| 23 | Wash hand before touching the young  | 3.48 | 0.66 | 0.05  | 1.98  | *NS |
| 24 | Check the kindles for belies and dead ones   | 3.56 | 0.25 | 0.2   | 1.98  | *NS |
| 25 | Provide adequate feed and drinking water after kindling                            | 3.77 | 0.17 | 0.37  | 1.98  | *NS |
| 26 | Remove the nest box 3weeks after kindling  | 3.73 | 0.19 | 0.11  | 1.98  | *NS |
| 27 | Rebreed 3 days latter when a doe looses all her litters at kindling.               | 3.69 | 0.46 | -0.06 | -1.98 | *NS |
| 28 | Rebreed immediately if the doe losses all her litter several days after kindling.  | 3.61 | 0.57 | -0.1  | -1.98 | *NS |
| 29 | Replace unproductive doe or buck.  | 3.47 | 0.66 | -0.07 | -1.98 | *NS |
| 30 | Wean at about 4weeks   | 3.57 | 0.58 | 0.02  | 1.98  | *NS |
| 31 | Mate doe again at 10 weeks after kindling  | 3.69 | 0.3  | 0.51  | 1.98  | *NS |

**Key:** X= mean, SD= Standard Deviation, t-cal= t calculated, t-tab=t-table, Rem= Remark, \*= required \*\* Not Required, NS= no significant difference, S= significant difference

The data on table 2 showed that all the 31 items in breeding were required because their means ranged between 3.19 and 3.77. This indicates that the means were above the cut off point of 2.55 implying that the respondents agreed to the items as entrepreneurial skills required in breeding rabbit. The table also revealed that the standard deviation (SD) of the items ranged from 0.12-1.00 which was below 1.96. This implied that the respondents were not too far from the mean and from one another in their responses. This implied that the mean values of the items were valid Furthermore, all the 31 items had their t-calculated values less than their t-table values.. This indicated that there was no significant difference in the mean ratings of the responses of the two groups of respondent on the entrepreneurial skills required in breeding rabbit. This led to the rejection of the null hypothesis

### Research Question 3

What are the skills required in housing and feeding of rabbit?

### Hypothesis 3

There is no significant difference in the mean ratings of the responses of extension agents, rabbit farmers on the entrepreneurial skills required in housing and breeding of rabbit

The data answering the research question and testing the hypothesis are presented in table 3

Table 3: Mean Ratings and T-Test Analysis of the Responses of Extension Agents, and Rabbit Farmers on the Entrepreneurial Skills Required in Housing and Feeding of Rabbit N=65

| SN | Item Statement  | X   | SD  | t-cal | t-tab | RMK |
|----|---|-----|-----|-------|-------|-----|
|    | <b>Housing</b>  |     |     |       |       |     |
| 1  | Provide constructed cages of about 30" x 30" x 28"  | 3.3 | 0.6 | 0.17  | 1.98  | *NS |
| 2  | Provide round hutch for the buck  | 3.5 | 0.3 | -0.9  | 1.98  | *NS |
| 3  | Provide feeding and drinking trough in the cage   | 3.6 | 0.6 | -1.1  | 1.98  | *NS |
| 4  | Introduce the doe and buck to their separate cages.   | 3.6 | 1.8 | -1.9  | 1.98  | *NS |
| 5  | Identify bucks with letters A, B, C, D, E, or tattoo each one.                              | 3.6 | 0.5 | -0.3  | 1.98  | *NS |
| 6  | Protect the rabbit from predators   | 3.1 | 0.6 | -0.2  | 1.98  | *NS |
| 7  | Cull the ones that bullies the young at 2 <sup>nd</sup> kindling                            | 3.1 | 0.7 | 1.16  | 1.98  | *NS |
| 8  | Select replaceable stock from mothers that produce the largest, fastest growing litters     | 3.3 | 0.4 | -0.6  | 1.98  | *NS |
| 9  | Identify the ones that are good for breeding purposes                                       | 3.2 | 1.1 | 0.65  | 1.98  | *NS |
| 10 | Assign latter to any replaced doe or buck.  | 3.2 | 0.6 | -1    | 1.98  | *NS |
| 11 | Keep replacement at the rate of one young doe/buck each month for every 12 working doe/buck | 3   | 0.6 | -1.4  | 1.98  | *NS |

Table 3: Contd.,

|    | Feeding  |     |     |      |      |      |
|----|--|-----|-----|------|------|------|
| 12 | Plant green vegetables in the garden for the feeding of rabbit                               | 3.4 | 0.4 | 1.75 | 1.98 | *NS  |
| 13 | Use a sound feeding program.   | 3.1 | 0.5 | 1.4  | 1.98 | *NS  |
| 14 | Collect and wash green plant feeds before feeding them                                       | 3.3 | 0.6 | 0.79 | 1.98 | *NS  |
| 15 | Give young rabbits the best quality feed (cabbage, lettuce, stylo.                           | 3.5 | 0.5 | 1.66 | 1.98 | *NS  |
| 16 | Provide clean drinking water in a bowl.  | 3.4 | 0.4 | 1.39 | 1.98 | *NS  |
| 17 | Use automatic nipple-type Locate nipples near the middle of the cage and 8'' above the floor | 3.6 | 0.2 | 1.45 | 1.98 | *NS  |
| 18 | Provide salt as supplement.  | 3.1 | 0.5 | 0.75 | 1.98 | *NS  |
| 19 | Feed a doe/buck with pelleted rabbit grain.  | 3.2 | 0.4 | 1.46 | 1.98 | *NS  |
| 20 | Feed doe with hay to stop diarrhoea after kindling.  | 3.2 | 0.8 | 0.52 | 1.98 | *NS  |
| 21 | Feed a doe at 4-6.oz each day until kindling.  | 3.7 | 0.2 | 1.02 | 1.98 | *NS  |
| 22 | Feed 12-16oz for 3-5days after kindling and then give full feed until bunnies are weaned.    | 3.6 | 0.2 | 0.05 | 1.98 | *NS  |
| 23 | Give fortified pellets feed with additional vitamins during a heavy breeding schedule.       | 3.5 | 0.5 | 0.52 | 1.98 | *NS  |
| 24 | Mix rabbit dropping with feeds and feed them   | 3.2 | 0.4 | 1.67 | 1.98 | *NS  |
| 25 |  | 2.1 | 0.3 | 0.22 | 1.98 | **NS |

**Key:** X= mean, SD= Standard Deviation, t-cal= t calculated, t-tab=t-table, Rem= Remark, \*= required \*\* Not Required, NS= no significant difference, S= significant difference

From the observation of table 3 above, it was discovered that 24 items had their mean above the arithmetic mean except item 25. This implied that the the skills were required in feeding in rabbit production. This indicated that the mean values of the items were valid Furthermore, all the 25 items had their t-calculated values less than their t-table values. This indicated that the there was no significant difference in the mean ratings of the responses of the two groups of respondent on the entrepreneurial skills required in housing and feeding rabbit. Therefore the null hypothesis of no significant difference was accepted for all the items.

#### Research Question 4

What are the entrepreneurial skills required in health management of rabbit?

#### Hypothesis 4

There is no significant difference in the mean ratings of the responses of extension agents and rabbit farmers on the entrepreneurial skills required in health management of rabbit.

The data for answering the research question and testing the hypothesis are presented in table 4.

**Table 4: Mean Ratings and T-Test Analysis of the Responses of Extension Agents, and Rabbit Farmers on the Entrepreneurial Skills Required in Health pManagement of Rabbit N=65**

| SN | Item Statement  | X    | SD   | t-Cal | t-Tab | RMK |
|----|---|------|------|-------|-------|-----|
| 1  | Select appropriate breeding stock from reliable source                                | 3.64 | 0.23 | 1.35  | 1.98  | *NS |
| 2  | Stock at the required density   | 3.74 | 0.19 | 1.67  | 1.98  | *NS |
| 3  | Handle rabbits in proper way  | 3.59 | 0.64 | 0.59  | 1.98  | *NS |
| 4  | Determine the health status of the rabbit daily                                       | 3.30 | 0.60 | 1.53  | 1.98  | *NS |
| 5  | Inspect the anus of rabbit to see if it is dirty                                      | 3.23 | 0.60 | -1.16 | 1.98  | *NS |
| 6  | Put them on the ground and let them jump to watch for irregular legs                  | 3.14 | 0.62 | 0.94  | 1.98  | *NS |
| 7  | Watch for sneezing rabbits  | 3.97 | 0.83 | -1.64 | 1.98  | *NS |
| 8  | Check and feel the stomach for smoothness spongy feeling indicates intestine troubles | 2.84 | 0.87 | 0.23  | 1.98  | *NS |
| 9  | Set aside extra cage for isolation of sick ones                                       | 3.13 | 0.74 | 0.42  | 1.98  | *NS |

**Table 4: Contd.,**

|    |   |      |      |       |      |     |
|----|---|------|------|-------|------|-----|
| 10 | Clean the cage every day  | 2.84 | 0.83 | -0.76 | 1.98 | *NS |
| 11 | Pack the manure and urine in the cage for use in the farm       | 3.04 | 0.56 | 0.74  | 1.98 | *NS |
| 12 | Burn the cage with a hand touch or propane burner               | 3.36 | 0.84 | 0.82  | 1.98 | *NS |
| 13 | Keep show animals away from breeding stock                      | 3.19 | 0.85 | 2.24  | 1.98 | *NS |
| 14 | Feed properly with nutritious plants parts                      | 3.51 | 0.25 | -1.85 | 1.98 | *NS |
| 15 | Cull sick ones treat and watch it for 3weeks                    | 3.31 | 0.49 | -1.46 | 1.98 | *NS |
| 16 | Consult veterinary doctor for advice and treatment of sick ones | 3.30 | 0.60 | 1.52  | 1.98 | *NS |

**Key:** X= mean, SD= Standard Deviation, t-cal= t calculated, t-tab=t-table, Rem= Remark, \*= required \*\* Not Required, NS= no significant difference, S= significant difference

The table above presented the views of the respondents on the entrepreneurial skills required in health management in rabbit production. It is observed that all the items had their mean greater than the arithmetic mean of 2.55 indicating that all the items were required for health management in rabbit production. The calculated t-values were found not to be significant meaning that the respondent did not differ significantly in their views.

### Research Question 5

What are the entrepreneurial skills required in marketing of rabbit?

### Hypothesis 5

There is no significant difference in the mean ratings of the responses of extension agents and rabbit farmers on the entrepreneurial skills required in marketing of rabbit.

The data for answering the research question and testing the hypothesis are presented in table 5.

**Table 5: Mean Ratings and T-Test Analysis of the Responses of Extension Agents, and Rabbit Farmers on the Entrepreneurial Skills Required in Marketing of Rabbit N=65**

| SN | Item Statement   | X    | SD   | t-Cal | t-Tab | RMK |
|----|--|------|------|-------|-------|-----|
| 1  | Identify rabbit buyers   | 3.69 | 0.29 | 0.87  | 1.98  | *NS |
| 2  | Make market survey for acceptability                           | 3.74 | 0.44 | -1.20 | 1.98  | *NS |
| 3  | Advertise rabbit for sale through media; phone calls, internet | 3.48 | 0.42 | 1.30  | 1.98  | *NS |
| 4  | Select only matured rabbit for market                          | 3.30 | 0.71 | 1.56  | 1.98  | *NS |
| 5  | Classify the selected one into grades                          | 3.52 | 0.25 | 0.40  | 1.98  | *NS |
| 6  | Sell breeding stock to other buyers                            | 3.69 | 0.21 | -1.01 | 1.98  | *NS |
| 7  | Fix price for each grade                                       | 3.69 | 0.21 | 1.72  | 1.98  | *NS |
| 8  | Slaughter and sell as frozen or dried meat                     | 3.73 | 0.20 | 0.65  | 1.98  | *NS |
| 9  | Sell on the spot or transport to buyers.                       | 3.48 | 0.34 | 0.65  | 1.98  | *NS |
| 10 | Receive payment at the selling spot                            | 3.27 | 0.20 | 1.47  | 1.98  | *NS |
| 11 | Continue to maintain the unsold ones                           | 3.26 | 0.28 | 0.62  | 1.98  | *NS |
| 12 | Take record of sold and unsold ones                            | 3.56 | 0.33 | 0.91  | 1.98  | *NS |
| 13 | Calculate the income and expenditure                           | 3.09 | 0.78 | 0.56  | 1.98  | *NS |
| 14 | Sell on credit where necessary                                 | 2.05 | 0.78 | 0.55  | 1.98  | *NS |

**Key:** X= mean, SD= Standard Deviation, t-cal= t calculated, t-tab=t-table, Rem= Remark, \*= required \*\* Not Required, NS= no significant difference, S= significant difference

Table 5 revealed that 13 out of the 14 items marketing had their mean values higher than the arithmetic mean of 2.55. They ranged between 3.26 and 3.74. This showed that the means of items 1 to 13 were greater than 2.55, implying that the respondents agreed that the items were skills required in marketing of rabbit in Kogi State. The table also revealed that the standard deviation ranged between 0.21 and 0.78 was less than 1.96, indicating the closeness of the respondents to

the mean, indicating that the mean values of the items were valid.

## RESULTS

The study found out that 16 entrepreneurial skills were required in planning, 31 in breeding, 24 in housing and feeding, 16 in health management and 13 in marketing for rabbit production. On planning the findings in table 1 were in agreement with the view of Thomson and Sheldon (2001) who advised that a beginner in livestock enterprise should make contact with established producers to have the idea of what to plan for. Lukefahr (2004) also said that market research should be completed before committing resources to production. This is because in a situation where market does not exist, there is need to create one or the business would be on a subsistence level for family consumption. Olaitan and Mama (2001) also said that the planning activities for any project include formulation of specific objectives, review of the objectives periodically and drawing up programme plan for the enterprise among others.

On research question 2, the findings were in agreement with the view of Schere (2004) that does should be bred at 4-5 months of age. According to the author, mating should be carried out at cooler times of the day and the doe should always be taken to the bucks' hutch to avoid the doe from fighting the buck with the aim of defending its territory.

On housing and feeding, the findings were in line with the suggestions made by Martins (1998) that nursing does and fryers should be fed moderately with cabbage, lettuce and grain. The author further stated that nest boxes should be provided in the cages of 30"x 30 x 28" to help the doe in kindling.

On the area of health management of rabbit, the result of the finding is in line with the view of Schere (2004) who said that appropriate hygiene should be maintained in rabbitary by regularly determining the health status of the animals. However the finding disagreed with the view of Smith (1998) said that it is necessary to install a good solid waste removal system that will automatically remove the wastes the researcher thinks that the view of the author should be upheld but not immediately because the teachers are not buoyant enough to purchase automatic disposal system at the start of the business. The opinion of Sell (2009) who said that accurate record keeping allows for objective management decisions and proper identification of the performance of the animals is in agreement with the finding of question 5.

On hypotheses tested, the study found out that there significant differences do not exist in the mean ratings of the responses of the extension agents and rabbit farmers on all the entrepreneurial skills required in rabbit. The implication of this finding is that the professional and occupational experiences of the respondents did not significantly influence their responses on the identified items.

The findings of the study on entrepreneurial skills required in rabbit production were validated by the views, opinions, advice and statements of the authors above. It is therefore necessary that the identified entrepreneurial skills should be utilised by the teachers of agriculture to help provide satisfactory economic benefits to them.

## CONCLUSIONS

It is important that due to the poor remuneration of teacher in Kogi state, and for them to keep in the job requires some support businesses. Rabbit production with its low capital outlay could be very rewarding for these marginalized income earners. It was therefore recommended that the 100 entrepreneurial skills identified by this study be packaged and given to teachers of agriculture in the state to utilize for establishment of rabbit production enterprise as a part-time business with the aim of enhancing their income.



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